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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,271	09/26/2006	Akitoshi Hironaka	295728US3PCT	3423
22850 7590 07/11/2008 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER HAYES, BRET C	
			ART UNIT 3641	PAPER NUMBER
			NOTIFICATION DATE 07/11/2008	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/594,271	<b>Applicant(s)</b> HIRONAKA ET AL.	
	<b>Examiner</b> Bret Hayes	<b>Art Unit</b> 3641	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-32 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> .                                  | 6) <input type="checkbox"/> Other: ____.                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :26 SEP 06, 26 DEC 06, 03 JAN 08, and 12 JUN 08.

## DETAILED ACTION

### *Claim Objections*

1. Claim 26 is objected to because of the following informalities: line 5 appear to repeat itself into line 6. Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 17 – 29 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 3,971,320 to Lee.
4. Re claim 17, Lee discloses the claimed invention including a metal holder with electrode pins, comprising: a metal holder **12** and at least two electrode pins **32, 36** for allowing passage of electrical current, wherein each electrode pin is larger in diameter at its head, upper portions thereof in Fig. 1, for example, portion than at its terminal portion; plastic members **10** and interior portion, presumably **10** as well, arranged to surround a part of the respective electrode pins circumferentially, and wherein through holes for the respective electrode pins to pass through the holder are formed in the holder, and the electrode pins are fixed to the holes via the plastic members, each hole including a diameter-reduction portion at a part thereof, as shown in Fig. 1, for example.
5. Re claim 18, Lee further discloses a constricted portion, as between **28** and **32**, for example.

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6. Re claim 19, Lee discloses thermoplastic and thermosetting materials, both of which are super engineering plastic.

7. Re claim 20, Lee discloses the claimed device. The method of forming the device is not germane to the issue of patentability of the device itself, such as, pressed portions, absent any evidence to the contrary. Therefore, this limitation has not been given patentable weight. Since the claim is directed to an article and not a method of manufacture, the prior art need only satisfy the structural requirements. See MPEP 2113, regarding product-by-process.

8. Re claim 21, Lee would appear to anticipate the larger and smaller diameters as shown.

9. Re claim 22, Lee further discloses at a portion, of **12**, for example, on the side closer to an igniter portion, a cylindrical projecting portion surrounding the igniter portion and a firing agent **14, 16** filled in an inner space surrounded by the projecting portion. Because any element can include any number of “portions,” Lee anticipates the claim.

10. Re claim 23, see claim 22 above. Lee would appear to anticipate.

11. Re claim 24, Lee discloses the claimed device. The method of forming the device is not germane to the issue of patentability of the device itself, such as, formed by injection molding, absent any evidence to the contrary. Therefore, this limitation has not been given patentable weight. Since the claim is directed to an article and not a method of manufacture, the prior art need only satisfy the structural requirements. See MPEP 2113, regarding product-by-process.

12. Re claim 25 and 26, in light of the structure disclosed by Lee the method would have been inherent, since it is the normal and logical manner in which the device can be made.

13. Re claim 27, Lee further discloses a gas generator including a cup, that ‘portion’ indicated in claim 22 or 23, for example, an igniter portion, same, and a resistance element **24**,

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for example, interconnecting (electrically, at least) head portions of the pins and a firing agent as above.

14. Re claim 28, see MPEP 2113 regarding product-by-process.

15. Re claim 29, Lee further discloses an enhancer **16** or **14** holder. This is asserted because most charges include some type of binding material, Which can broadly and reasonably be construed to anticipate a holder as claimed.

16. Re claim 32, Lee discloses the elements being joined. In light of the MPEP 2113, the prior art need only satisfy the structure and not the process claimed to manufacture that structure.

***Claim Rejections - 35 USC § 103***

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. Claims 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee.

19. Re claim 30, Lee discloses the claimed invention except for an insulating member on a surface of the holder. Lee does discloses insulating members being utilized. It would have been obvious to one having ordinary skill in the art at the time the invention was made to duplicate the insulators as desired, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St, Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

20. Re claim 31, Lee discloses the claimed invention except for an additional cap arranged to cover an outer portion of an enhancer agent holder. It would have been obvious to one having ordinary skill in the art at the time the invention was made to duplicate coverings, since it has

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been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

***Conclusion***

Any inquiry concerning this communication should be directed to Bret Hayes at telephone number (571) 272 – 6902 or email address [bret.hayes@uspto.gov](mailto:bret.hayes@uspto.gov), which is preferred. The examiner can normally be reached Monday through Friday from 5:30 am to 2:00 pm, Eastern Standard Time.

The Central FAX Number is **571-273-8300**.

If attempts to contact the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Carone, can be reached at (571) 272 – 6873.

/Bret Hayes/

Primary Examiner, Art Unit 3641

10-Jul-08